including a capture guide and a first alignment indicator included on the capture guide. The capture guide area may completely enclose at least a portion of the sample material area. The application may determine a first location of the initial material sample image where the first alignment indicator has been captured in the initial material sample image and stores this information as a first matched alignment indicator pair, where the first matched alignment indicator pair associates the first alignment indicator with the first position. The application transforms the initial material sample image, based on the first matched alignment indicator pair, to render an alignment corrected material sample image. Additionally, the application identifies, from the alignment corrected material sample image, a sample material swatch area, where the sample material swatch area includes at least one instance of a pattern found in the initial material sample image and stores on the mobile device the sample material swatch area and the initial material sample image.

[0013] In an implementation, the material data collection system allows correcting positions of application provided indicators by a user. For example, the material data collection system may determine initial or a first position for an alignment indicator but allow a user to change the position of the alignment indicator. This includes displaying on the mobile device the initial material sample image overlaid with a first application provided alignment indicator at a first position. For example, there may include a base image layer with the initial material sample image. An application generated layer, including the first alignment indicator, may be overlaid over the base image layer. While displaying the initial material sample image, the material data collection system may receive a first adjustment of the first application provided alignment indicator from the first position to a second position to associate the first application provided alignment indicator with the first alignment indicator shown on the initial material sample image to create a first matched alignment indicator pair. For example, the first matched alignment indicator pair associates the first alignment indicator with the first application provided alignment indicator at the second position and not the first position. The association may be made by dragging the first application provided alignment indicator to the second position where, according to the user, the first alignment indicator of the capture guide appears on the base image layer. The first application provided alignment indicator at the second position may be displayed on the mobile device.

[0014] The material data collection system may include transforming the initial material sample image, based on the first matched alignment indicator pair, to render an alignment corrected material sample image. For example, while displaying on the mobile device the initial material sample image overlaid with the first application provided alignment indicator at the first position may also include a second application provided alignment indicator at a third position. The material data collection system may receive a second adjustment of the second application provided alignment indicator from the third position to a fourth position to associate the second application provided alignment indicator with the second alignment indicator shown on the initial material sample image to create a second matched alignment indicator pair. The material data collection system may transform the initial material sample image based upon a straight line determined by the first matched alignment indicator pair and the second matched alignment indicator pair, to render an alignment corrected material sample image. The material data collection system may also include identifying, from the alignment corrected material sample image, a sample material swatch area, where the sample material swatch area includes at least one instance of a pattern found in the initial material sample image and storing on the mobile device the sample material swatch area and the initial material sample image. The initial material sample image may also be uploaded to a product lifecycle management software for later retrieval and use.

[0015] The material data collection system may also include transforming the initial material sample image by compensating, based on the first match alignment indicator pair, for at least a lens aberration introduced by a lens of the mobile device when capturing the initial material sample image. The first adjustment may include selecting the first application provided alignment indicator on a touch screen of the mobile device and moving the first application provided alignment indicator from the first position to the second position. A check may be performed by the material data collection system to determine that the first application provided alignment indicator is associated with the first alignment indicator shown on the initial material sample image. For example, each application provided alignment indicator may be associated to only one alignment guide of the capture guide.

[0016] In an implementation, the material data collection system may include only a portion of the initial material sample image. This may be due to display size limitations of the mobile device or correction by the material data collection system to optimize display of the capture guide and the sample material within a cut out area of the capture guide. The cut-out portion may be of any size and shape. For example, the cut-out shape may form a bounded polygon or a partially bounded polygon. The bounded polygon may be identified by the material data collection system without a user providing input as to where the bounded polygon is shown in the initial material sample image. For example, a user is not required to identify lines or points that define where the bounded polygon is shown in the image.

[0017] In another implementation, the material data collection system includes before capturing the initial material sample image, taking an orientation of a sample material and capture guide by the mobile device. For example, the mobile device may be laid upon a tabletop or other surface that the capture guide is resting upon to record the orientation of the tabletop. Before capturing the initial material sample image, the material data collection system includes providing visual feedback indicating whether at a given time the mobile device is in the same orientation of the sample material and capture guide. Some examples of visual indication may include a number of degrees or a direction to tilt the mobile device in order to orient the mobile device in a similar orientation as the orientation of the sample material. An accelerometer of the mobile device may be used to capture orientation information. The method may also include before capturing the initial material sample image, taking an orientation of a sample material and capture guide by the mobile device; before capturing the initial material sample image and after a user input to capture the initial material sample image, accessing an accelerometer of the mobile device to determine whether at a given time the mobile device is in a similar orientation of the sample material and